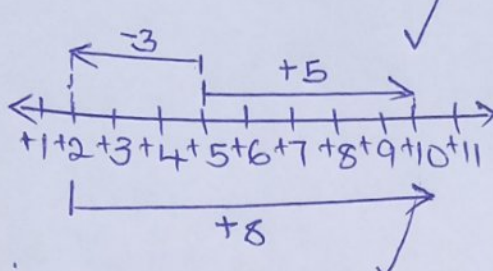
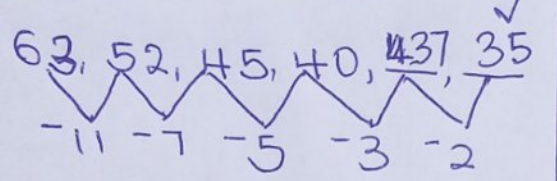
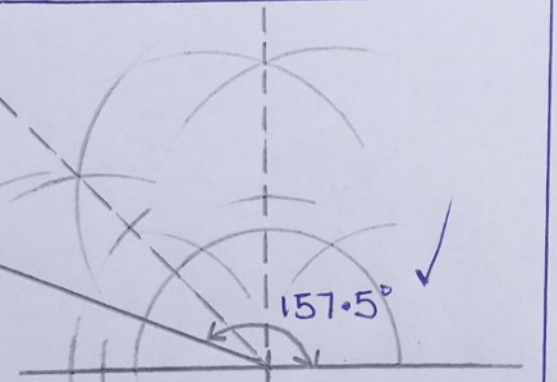
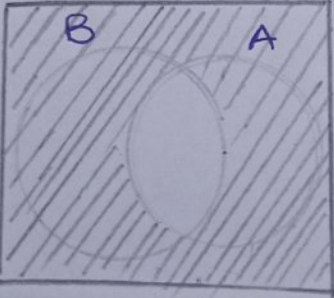


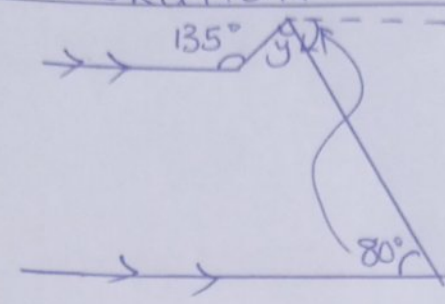
NERDS EXAMINATION SERIES (MATHEMATICS DEPARTMENT)
MARKING GUIDE FOR PRIMARY LEAVING MOCK 2024 (MTC)

Q.N	SOLUTION	MARKS	COMMENT
1.	$ \begin{array}{r} 0505 \\ 5 \overline{) 2525} \\ \underline{0 \times 5 = 0} \\ 25 \\ \underline{5 \times 5 = 25} \\ 002 \\ \underline{0 \times 5 = 0} \\ 25 \\ \underline{5 \times 5 = 25} \\ 00 \end{array} $ <p>$\therefore 2525 \div 5 = 505 \checkmark$</p>	<p>B₁</p> <p>A₁</p>	<p>- Encourage the use of Long division</p> <p>- Follow the order DMSB</p> <p>Divide } long Multiply } division Subtract } Bringdown }</p>
2.	<p>Sheep he had at first</p> $ \begin{array}{r} 43 \text{ sheep} \\ + 19 \text{ sheep} \\ \hline 62 \text{ sheep } \checkmark \end{array} $ <p>62 in Roman Numerals:</p> $62 = 60 + 2$ $62 = LX \quad II$ $62 = LXII \quad \checkmark$	<p>B₁</p> <p>A₁</p>	<p>- Getting the number of sheep had at first is the no. 1 thing to be done.</p>
3.	<p>Complement of $(x-50)^\circ$</p> <p>Let the complement be y</p> $y + (x-50)^\circ = 90^\circ$ $y = 90^\circ - (x-50)^\circ$ $y = 90^\circ - x + 50^\circ$ $y = 90^\circ + 50^\circ - x$ $y = 140^\circ - x$ $y = (140^\circ - x)^\circ \checkmark$	<p>B₁</p> <p>A₁</p>	<p>- Complementary angles add up to 90°</p> <p>- Accept $90 - (x-50)^\circ$ straight forward</p>

Q/N	SOLUTION	MARKS	COMMENT
4	<p>A dozen has 12 items.</p> <p>Sh. 9000 \longleftrightarrow 12 books</p> <p>Sh. 1 \longleftrightarrow $\frac{12}{9000}$ books</p> <p>Sh. 3000 \longleftrightarrow $12 \times \frac{1}{3} = 4$ books</p> <p>Sh. 3000 \longleftrightarrow 4 books</p> <p><u>4 books can be purchased</u> at sh. 3000 ✓</p>	<p>B</p> <p>A</p>	<p>- Teach to master the approach of direct and indirect proportion to prevent learners from confusing the two.</p>
5	<p>Length of the arc is given to be 1256 cm</p> <p>$\frac{\theta}{360} \times 2\pi r = 1256 \text{ cm}$</p> <p>$\frac{72}{360} \times 2 \times 3.14 r = 1256 \text{ cm}$</p> <p>$\frac{1}{5} \times 2 \times 3.14 r = 1256 \text{ cm}$</p> <p>$4 \times 3.14 r = 1256 \text{ cm}$</p> <p>$10 \times 100$</p> <p>$\frac{1256 r}{1000} = 1256 \text{ cm} \times 1000$</p> <p>$\frac{1256 r}{1000} = 1256000 \text{ cm}$</p> <p>$1256 r = 1256000$</p> <p>$r = 1000 \text{ cm}$ ✓</p>	<p>B</p> <p>A</p>	<p>- Follow through steps</p> <p>- Revise concept of circles Vigorously</p> <p>For correct answer</p>

Q.N	SOLUTION	MARKS	COMMENT
6	 <p>$\therefore +5 - -3 = +8$</p>	B A1	- For correct position of arrows - For summary.
7.	 <p><u>Difference</u></p> <p>H - L</p> <p>37 - 35 ✓</p> <p>= 2</p>	B A1	For determining next two numbers. - For finding the difference.
8.		B2	- Revise all reflex, complements and supplements of angles that can be constructed without a protractor - On sight
9.	<p>$(\frac{1}{2} \text{ of } 4p) - p = 19$</p> <p>$(\frac{1}{2} \times 4p) - p = 19$</p> <p>$2p - p = 19$</p> <p>$p = 19$ ✓</p>	B1 A1	- For following BODMAS order properly - For correct answer

Q.N	SOLUTION	MARKS	COMMENT
10	$\sqrt{7\frac{1}{9}} = \sqrt{\frac{64}{9}}$ $\sqrt{7\frac{1}{9}} = \frac{\sqrt{64}}{\sqrt{9}}$ $\sqrt{7\frac{1}{9}} = \frac{2 \times 2 \times 2}{3}$ $\sqrt{7\frac{1}{9}} = \frac{8}{3}$ $\sqrt{7\frac{1}{9}} = 2\frac{2}{3} \checkmark$ <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> $\begin{array}{r} 2 \overline{) 64} \\ \underline{2 \ 32} \\ 2 \ 16 \\ \underline{2 \ 8} \\ 2 \ 4 \\ \underline{2 \ 2} \\ 39 \\ \underline{33} \\ 6 \end{array}$ </div> </div>	<p>B₁</p> <p>A₁</p>	<p>- For numerator square root and denominator root separately</p> <p>- Answer must be put back to mixed numeral format.</p>
11	<p>7 2 or</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> $\begin{array}{c} 2 \wedge \\ 36 \\ 2 \wedge \\ 18 \\ 2 \wedge \\ 9 \\ 3 \wedge \\ 3 \\ 3 \wedge \\ 3 \end{array}$ </div> <div> $\begin{array}{r} 2 \overline{) 72} \\ \underline{2 \ 36} \\ 2 \ 18 \\ \underline{3 \ 9} \\ 3 \ 3 \\ \underline{3 \ 3} \\ 0 \end{array}$ </div> </div> <p>$2 \times 2 \times 2 \times 3 \times 3$</p> <p>$2^3 \times 3^2$</p>	<p>B₁</p> <p>A₁</p>	<p>- Superscripts also mean powers.</p> <p>- Reject subscripted form.</p>
12.		<p>B₂</p>	<p>on sight</p>

Q/N	SOLUTION	MARKS	COMMENT												
13.	<p></p> $y + 80^\circ = 135^\circ$ $y + 80^\circ - 80^\circ = 135^\circ - 80^\circ$ $y = 55^\circ \checkmark$	B A	Revise angles formed on parallel lines.												
14.	<p>144_{three} to base ten</p> <table border="1" data-bbox="285 916 541 1117"> <tr> <td>1×3^2</td> <td>4×3^1</td> <td>4×3^0</td> </tr> <tr> <td>1</td> <td>4</td> <td>4</td> </tr> </table> $(1 \times 3^2) + (4 \times 3^1) + (4 \times 3^0)$ $(1 \times 3 \times 3) + (4 \times 3) + (4 \times 1)$ $9 + 12 + 4$ 25_{ten} $\therefore 144_{\text{three}} = 25_{\text{ten}} \checkmark$	1×3^2	4×3^1	4×3^0	1	4	4	B A	Day to day, usual base, ordinary base, etc are words that can mean decimal base or base ten.						
1×3^2	4×3^1	4×3^0													
1	4	4													
15.	<p>ST = ET - D₇₅</p> <table border="1" data-bbox="237 1700 716 1924"> <tr> <td>1:15</td> <td>12:15</td> <td>75</td> </tr> <tr> <td>+ 12:00</td> <td>+ 13:15</td> <td>+ 15</td> </tr> <tr> <td>13:15</td> <td>- 2:25</td> <td></td> </tr> <tr> <td></td> <td>10:50</td> <td></td> </tr> </table> <p>It started at 10:50 am ✓</p>	1:15	12:15	75	+ 12:00	+ 13:15	+ 15	13:15	- 2:25			10:50		B	for getting the starting time first
1:15	12:15	75													
+ 12:00	+ 13:15	+ 15													
13:15	- 2:25														
	10:50														

Q.N

SOLUTION

MARKS

COMMENT



B

For correctly representing the starting time on the clock face.

16

$$\frac{SOD}{AOD} = \text{Mean}$$

$$\frac{P+3+0+7}{4} = 4$$

$$\frac{4 \times P + 3 + 0 + 7}{4} = 4 \times 4$$

$$P + 10 = 16$$

$$P = 16 - 10$$

$$P = 6 \checkmark$$

B

- For correct interpretation.

A

- For correct answer.

17.

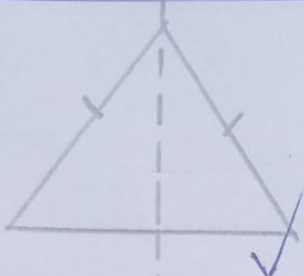
Thousands	Units
20	024

Twenty thousand
twenty four ✓

B₂

on sight

Q.N	SOLUTION	MARKS	COMMENT
18.	<p>From,</p> $(\text{Last note} - \text{1st note}) = \text{No of } t_1 \text{ notes}$ $\frac{\text{Serial no of the 1st note}}{\downarrow}$ $= \text{last note no.} - (100-1) \text{ notes}$ $= \text{AP00157839}$ $\begin{array}{r} - 99 \\ \hline \text{AP00157740} \end{array}$	<p>B</p> <p>A</p>	<p>- Encourage mastery of concept in all areas.</p> <p>- For correct subtraction.</p>
19.	$S \times S \times S = V$ $S^3 = V$ $S^3 = 2.25 \text{ m}^3$ $\sqrt[3]{S^3} = \sqrt[3]{2.25 \text{ m}^3}$ $\sqrt[3]{S^3} = \sqrt[3]{\frac{225}{100} \text{ m}^3}$ $\sqrt[3]{S^3} = \frac{\sqrt[3]{225} \text{ m}^3}{\sqrt[3]{100}}$ $S = \frac{15}{10} \text{ m}$ $S = 1.5 \text{ m}$ <p>The cube is 1.5m long.</p>	<p>B</p> <p>A</p>	<p>- Revise application of square root and cube root involving geometrical figures.</p> <p>- Learners should be encouraged to prime factorize first</p>

Q/N	SOLUTION	MARKS	COMMENT				
20.	 <p>1 Line of symmetry.</p>	B2	Revise all lines of symmetry including alphabetical letters				
21.	<p>a) <u>Value of m.</u></p> <p>$n(H)$ only = Neither</p> $18 - m = 2m + 3$ $18 - 3 = 2m - m$ $15 = m \quad \checkmark$	M A1	<p>- For correct interpretation</p> <p>- For correct answer</p>				
	<p>b) <u>Pupils who like only one game.</u></p> $= (5m) + (18 - m)$ $= (5 \times 15) + (18 - 15)$ $= 75 + 3$ $= 78 \text{ pupils} \quad \checkmark$ <p><u>Total no of pupils</u></p> $(5m) + (18 - m) + (m) + (2m + 3)$ $(5 \times 15) + (18 - 15) + 15 + (2 \times 15 + 3)$ $75 + 3 + 15 + 33$ 126 pupils <table border="1" data-bbox="229 1856 756 2013"> <tr> <td>$P = \frac{NOE}{SS}$</td> <td>$= \frac{78}{126}$</td> </tr> <tr> <td>$P = \frac{78}{126}$</td> <td>\checkmark</td> </tr> </table>	$P = \frac{NOE}{SS}$	$= \frac{78}{126}$	$P = \frac{78}{126}$	\checkmark	A1 M A1	<p>- Getting the Number of events (pupils who like only one game)</p> <p>For getting universal set</p> <p>For correctly writing the probability.</p>
$P = \frac{NOE}{SS}$	$= \frac{78}{126}$						
$P = \frac{78}{126}$	\checkmark						

Q.N	SOLUTION	MARKS	COMMENT
22.	<p><u>450 dollars to Ugh.</u></p> <p>1 US\$ = Ugh 3,600</p> <p>450 US\$ = $\frac{450 \times 3600}{\text{Ugh}}$ ✓</p> <p>450 US\$ = Ugh 1,620,000</p> <p><u>Amount spent in Ugh</u></p> <p>Ksh 1 = 40 uganda shillings</p> <p>Ksh 32275 = Ugh 32275 × 40 ✓</p> <p>Ksh 32275 = Ugh 1291,000</p> <p><u>Amount that remained</u></p> <p>Ugh. $1,620,000$</p> <p>- Ugh. 1291,000 ✓</p> <p>Ugh 329,000 ✓</p> <p><u>Ugh 329,000 to pounds</u></p> <p>Ugh 4,700 = 1 pound ✓</p> <p>Ugh 329,000 = $\frac{329000}{4700}$ pounds</p> <p>Ugh 329,000 = 70 pounds ✓</p> <p>He received £70 from the bank. ✓</p>	<p>By</p> <p>By</p> <p>By</p>	<p>- Revise foreign exchange rates</p> <p>- <u>Simple approach</u></p> <p>L-Little (Local to)</p> <p>F-Fox (Foreign)</p> <p>D-Dies (Divide)</p> <p>S-Slowly (selling price)</p> <p>F-Fire (Foreign to)</p> <p>L-Light (Local)</p> <p>M-Much (Multiply by)</p> <p>B-Brightness (Buying price)</p>

Q4

SOLUTION

MARKS

COMMENT

23. a) $(3+1+2+4)$ pupils
 $= 10$ pupils ✓

✓ B1

on sight

b)

Mark	frequency
30%	3
90%	1
75%	2
25%	4

The modal mark was 25% ✓

B1

For correct
 'identification'

c)
 $\text{Mean} = \frac{\text{SOD}}{\text{NOD}} \quad \checkmark \quad B1$

$$\text{Mean} = \frac{(30 \times 3) + (90 \times 1) + (75 \times 2) + (25 \times 4)}{3 + 1 + 2 + 4}$$

$$\text{Mean} = \frac{90 + 90 + 150 + 100}{10} \quad \checkmark \quad B1$$

$$\text{Mean} = \frac{430}{10}$$

$$\text{Mean} = 43$$

The mean score
 was 43% A

For correct
 working procedure

- For correct
 addition and
 multiplication.

For summary and
 correct answer.

Q.N

SOLUTION

MARKS

COMMENT

24

a)

Time frame	John B	Naboth
Now	$n+8$	n
4 yrs ago	$n+8-4$ $=n+4$	$n-4$ ✓

The ratio was 4:3

John B : Naboth = 4:3

$$n+4 : n-4 = 4:3$$

$$\frac{n+4}{n-4} = \frac{4}{3}$$

$$3(n+4) = 4(n-4)$$

$$3n+12 = 4n-16$$

$$3n-4n = -16-12$$

$$\frac{-n}{-1} = \frac{-28}{-1}$$

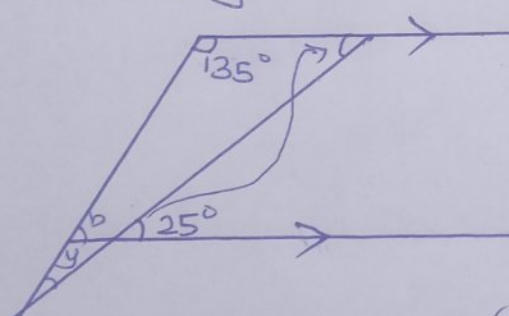
$$n = 28$$

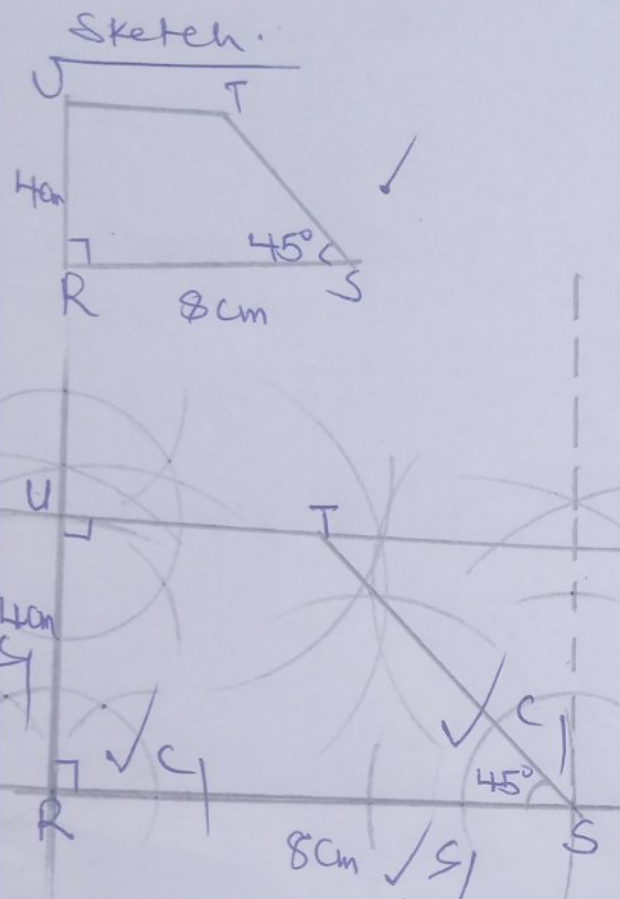
<u>John Bosco</u>	<u>Naboth</u>
$n+8$	$= n$ ✓
$28+8$	$= 28 \text{ years}$
<u>36 years</u> ✓	

Summarising
given information
on a simple
table form simplifies
work.

- Interpreting
the concept of
ratios
(Comparison of
items by division)

Q/N	SOLUTION	MARKS	COMMENT
24b)	<p> $\frac{1}{6}$ were absent When $(1 - \frac{1}{6})$ were present ✓ $\frac{6}{6} - \frac{1}{6} = \frac{5}{6}$ were present <u>No of children in the class</u> $= 35 \div \frac{5}{6}$ $= 35 \times \frac{6}{5}$ $= 42 \text{ pupils}$ ✓ $\frac{1}{7}$ were absent $\frac{1}{7} \times 42 = 6$ <u>6 pupils were absent</u> <u>Pupils present</u> $42 \text{ pupils} - 6 \text{ pupils}$ 36 pupils ✓ </p>	<p>✓ B A</p>	<p>For fraction present.</p> <p>- Getting the total number of pupils in the class.</p> <p>- Also getting the fraction present and working out that fraction of the total no is correct.</p>
25.	<p> Perimeter $\times 2 = 1000 \text{ m}$ $\text{Arc} + \text{AC} + \text{Arc} + \text{AC} = P$ $2(2\text{Arcs} + 2\text{AC}) = 1000 \text{ m}$ </p>	<p>✓</p>	

Q.N	SOLUTION	MARKS	COMMENT
Q.N	$2\left(\frac{2 \times 22 \times 1 \times 70}{7 \times 2} + 2AC\right) = 1000m$ $2(220 + 2AC) = 1000m$ $440 + 4AC = 1000m$ $4AC = (1000 - 440)m$ $4AC = 560m$ $\frac{4AC}{4} = \frac{560}{4}$ $AC = 140m$	<p>M</p> <p>B</p> <p>A</p>	<p>- Encourage simplified approach and guide learners to attain good question interpretation.</p> <p>- concept remains the same.</p>
26 value of y.	<p>(a)</p>  $y + 25^\circ + 135^\circ = 180^\circ$ $y + 160^\circ = 180^\circ$ $y + 160^\circ - 160^\circ = 180^\circ - 160^\circ$ $y = 20^\circ$	<p>M</p> <p>A</p> <p>M</p> <p>A</p>	<p>- correct interpretation</p> <p>- For correct answer</p> <p>- revise angles formed by parallel lines.</p>
⑥	$b + 135^\circ = 180^\circ \text{ (corr. ls)}$ $b = 180^\circ - 135^\circ$ $b = 45^\circ$ $\therefore b \text{ is } 45^\circ$		

Q.N	SOLUTION	MARKS	COMMENT
27.	<p>Sketch.</p>  <p>b) <u>Area</u></p> <p>$A = \frac{1}{2}h(a+b)$</p> <p>$A = \frac{1}{2} \times 4\text{cm} (4\text{cm} + 8\text{cm})$</p> <p>$A = \frac{1}{2} \times 4\text{cm} (12\text{cm})$</p> <p>$A = 2\text{cm} \times 12\text{cm}$</p> <p>$A = 24\text{cm}^2$</p> <p>The Area is 24cm^2</p>	<p>S₁</p> <p>C₂</p> <p>S₁</p> <p>A₁</p>	<p>The sketch carries a mark that's why it is very vital.</p> <p>- construction of 90° and 45° (one mark @)</p> <p>- correct sides (1 mark)</p> <p>- For correct method</p> <p>- The answer may vary depending on the length UT</p> <p>for getting the right answer.</p>

Q.N	SOLUTION	MARKS	COMMENT
28 a)	$3a + 2(b - c)$ $3 \times \frac{1}{2} + 2 \left(\frac{3}{4} - \frac{1}{4} \right)$ $3 \times \frac{1}{2} + 2 \left(\frac{3-1}{4} \right)$ $\frac{3}{2} + 2 \left(\frac{2}{4} \right)$ $\frac{3}{2} + \frac{1}{2} \times \frac{2}{1}$ $\frac{3}{2} + \frac{1}{1}$ $\frac{3+2}{2}$ $= \frac{5}{2}$ $= 2\frac{1}{2}$	M1	Follow through steps.
b)	$5(3n-1) - 3(n-1) = 22$ $15n - 5 - 3n + 3 = 22$ $15n - 3n + 3 - 5 = 22$ $12n - 2 = 22$ $12n = 22 + 2$ $\frac{12n}{12} = \frac{24}{12}$ $n = 2$	M1	<p>Correctly collecting like terms involving crossing equal signs.</p> <p>For answer.</p>

Q/N	SOLUTION	MARKS	COMMENT																			
29 a)	<p><u>143_{six} to base 10</u></p> <table border="1"> <tr> <td>$\times 6^2$</td> <td>$\times 6^1$</td> <td>$\times 6^0$</td> </tr> <tr> <td>1</td> <td>4</td> <td>3</td> </tr> </table> <p> $(1 \times 6^2) + (4 \times 6^1) + (3 \times 6^0)$ $(1 \times 6 \times 6) + (4 \times 6) + (3 \times 1)$ $36 + 24 + 3$ 63 ✓ </p> <hr/> <p><u>13_{six} to base 10</u></p> <table border="1"> <tr> <td>$\times 6^1$</td> <td>$\times 6^0$</td> </tr> <tr> <td>1</td> <td>3</td> </tr> </table> <p> $(1 \times 6^1) + (3 \times 6^0)$ $6 + 3$ 9 ✓ </p> <hr/> <p>$63 \div 9 = 7$</p> <p><u>7_{ten} to base six</u></p> <table border="1"> <tr> <td>B</td> <td>N</td> <td>R</td> </tr> <tr> <td>6</td> <td>7</td> <td></td> </tr> <tr> <td></td> <td>1</td> <td>1</td> </tr> </table> <p>7 = 11_{six}</p> <p>$\therefore 143_{\text{six}} \div 13_{\text{six}} = 11_{\text{six}}$ ✓</p>	$\times 6^2$	$\times 6^1$	$\times 6^0$	1	4	3	$\times 6^1$	$\times 6^0$	1	3	B	N	R	6	7			1	1	<p>P</p> <p>Q</p> <p>A</p>	<p>- In division of bases esp. when they are the same.</p> <p>Changing them to base 10 is a must and after changing back to the given base</p> <p>- In case the bases are different the answer can stay in base 10.</p>
$\times 6^2$	$\times 6^1$	$\times 6^0$																				
1	4	3																				
$\times 6^1$	$\times 6^0$																					
1	3																					
B	N	R																				
6	7																					
	1	1																				

Q/N	SOLUTION	MARKS	COMMENT
29b)	$(5 \times 10^6) + (4 \times 10^4) + (2 \times 10^{-2}) + (3 \times 10^{-3})$ $(5 \times 1000000) + (4 \times 10000) + (2 \times \frac{1}{100}) + (3 \times \frac{1}{1000})$ $5000000 + 40000 + 0.02 + 0.003$ 5000000.000 $+ \quad 40000.000$ $\quad \quad 0.020$ $\quad \quad \quad 0.003$ <hr/> $5,040,000.023 \checkmark$	A	<p>Correct arrangement of place values leads to the right answer.</p>
30 a)	<p>Total distance = 460 km</p> <p><u>Total time without stops</u></p> $T = \frac{D}{S}$ $T = \frac{460 \text{ km}}{5 \frac{4}{5} \text{ hr}}$ $T = 7 \frac{2}{3} \text{ hrs} \checkmark$ <hr/> <p><u>Total time on stopovers</u></p> $= 4 \times 40 \text{ min}$ $= 160 \text{ min}$	B	<p>Getting total time taken then applying the concept of duration.</p>

Q/N	SOLUTION	MARKS	COMMENT
	<p><u>Time for the whole journey</u></p> <p>160min + $7\frac{2}{3}$ hr</p> <p>2hr 40min + 7hr 40min</p> $\begin{array}{r} 2:40 \\ 7:40 \\ \hline 10:20 \end{array} \checkmark$ <p>10hr and 20min</p> <p><u>Arrival time in Kampala</u></p> $\begin{array}{r} 8:00 \text{ hr} \\ 10:20 \text{ hr} \\ \hline 18:20 \text{ hrs} \end{array} \checkmark$ $\begin{array}{r} 18:20 \\ -12:00 \\ \hline 6:20 \text{ pm} \end{array}$ <p>He arrived Kampala at 6:20 pm. \checkmark A</p>		
<p>⑧</p>	<p>80% of the journey</p> <p>$= \left(\frac{80}{100} \times 460 \right) \text{ km}$</p> <p>but 1 Litre was used in every 15km</p>	<p>R</p>	<p>- A learner must first know what 80% of the journey represents</p>

Q/N	SOLUTION	MARKS	COMMENT
	<p>15 km \longleftrightarrow 1 litre</p> <p>1 km \longleftrightarrow $\left(\frac{1}{15}\right)$ Litres</p> <p>$\left(\frac{80}{100} \times 460\right)$ km \longleftrightarrow $\left(\frac{80}{100} \times 460 \times \frac{1}{15}\right)$ Litres</p> <p>80% of the journey \longleftrightarrow $\left(\frac{368}{15}\right)$ Litres</p> <p>but 1 litre = Sh 260</p> <p><u>80% of the journey would cost</u></p> <p style="text-align: center;"> $\begin{array}{r} 260 \\ \text{Sh } 3900 \times 368 \\ \hline 15 \\ 1 \end{array}$ </p> <p style="text-align: center;"> $\begin{array}{r} \text{Sh } 260 \times 368 \\ \hline \text{Sh. } 95,680 \end{array}$ </p>		<p>Here you may encourage learners to let it be the way it is and get down with the calculation.</p>
c	<p>Time taken would be:</p> <p>$T = \frac{D}{S}$</p> <p>$T = \frac{556}{180}$ ✓</p> <p>$180 = 5\frac{3}{4}$ hrs</p>	By	<p>Getting the time he would take.</p>

Q/N	SOLUTION	MARKS	COMMENT
	<p>He would arrive Kampala at</p> <p>8:00 am + 5 $\frac{3}{4}$ hrs</p> <p>8:00 am + 5 hr 45 min</p> $\begin{array}{r} 8:00 \checkmark \\ 5:45 \\ \hline 13:45 \end{array}$ $\begin{array}{r} 13:45 \\ - 12:00 \checkmark \\ \hline 1:45 \text{ pm} \end{array}$	A	<p>- The answer should be in a 12 hr clock</p> <p>for correct answer.</p>
31.	<p>Principal (money borrowed)</p> <p>Amount = $P + I$</p> <p>Amount = sh 450,000</p> <p>sh 450,000 = $(PRT) + P$ ✓</p> <p>sh 450,000 = $\left(P \times \frac{2\frac{1}{2}}{100} \times 5\right) + P$</p> <p>sh 450,000 = $\left(P \times \frac{5}{2} \div 100 \times 5\right) + P$</p> <p>sh 450,000 = $\left(P \times \frac{5}{2} \times \frac{1}{100} \times 5\right) + P$</p>	B	<p>- Follow through the working procedure.</p>

Q/N	SOLUTION	MRK	COMMENT
	$Sh450,000 = (P \times \frac{5 \times 1}{2} \times \frac{100}{20} \times 5) + P$ $Sh450,000 = \frac{P}{8} + P$ $Sh450,000 \times 8 = \frac{P \times 8}{8} + P \times 8$ $Sh450,000 \times 8 = P + 8P$ Sh360,000 $Sh360,000 = 9P$ $\frac{400,000}{9} = \frac{1}{9}P$ $Sh400,000 = P$ $\therefore \text{He borrowed } Sh400,000$	<p>B</p> <p>A</p>	<p>The units should be properly placed</p> <p>For correct answer.</p>
b)	$I = P \times R \times T$ $I = Sh400,000 \times \frac{10}{100} \times 2$ $I = Sh80,000$ $A = Sh400,000 + 80,000$ $A = Sh480,000$ <p>He would pay Sh480,000</p>	<p>M</p> <p>A</p>	<p>For finding interest first</p> <p>For finally getting the amount.</p>

Q/N	SOLUTION	MRK	COMMENT
32. a	<p>No of poles = $\frac{\text{Perimeter}}{\text{Interval}}$</p> <p>No of poles = $\frac{2(L+W)}{10m}$</p> <p>No of poles = $\frac{2(120+50)m}{10m}$</p> <p>No of poles = $\frac{2 \times 170m}{10m}$</p> <p>No of poles = $\frac{340m}{10m}$</p> <p>No of poles = 34</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>A</p>	<p>In closed shapes we don't add or subtract anything, we deal normally.</p>
b	<p>2 poles \leftrightarrow sh 27000</p> <p>1 pole \leftrightarrow $\frac{\text{sh 27000}}{2}$ ✓</p> <p>34 poles \leftrightarrow $\frac{\text{sh 27000} \times 34}{2}$ ✓</p> <p>34 poles \leftrightarrow sh 459000 ✓</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>A</p>	<p><u>Reject</u></p> <p>2 poles = sh 27000</p> <p><u>Accept</u></p> <p>2 poles cost sh 27000</p>
c	<p>A = 2L</p> <p>A = L x W ✓</p> <p>A = 120m x 50m</p> <p>A = 6000m² ✓</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>A</p>	<p>- correct method</p> <p>Area is in sq units always</p>
END COMPILED BY 0701316438 (MIC DEPT)			